Patent claims

1. An electrode holder with an electrode cooling device (10) on its underside, characterized in that the electrode cooling device (10) is electrically insulated from the electrode holder (3).

2. The electrode holder as claimed in claim 1, characterized in that the electrode cooling device (10) essentially covers the underside of the electrode holder (3).

3. The electrode holder as claimed in claim 1 or 2, characterized in that the electrode cooling device (10) is fastened to the fixed parts (4, 5) of the electrode holder (3) and is supported on a movable part (6) of the same.

4. The electrode holder as claimed in one of claims 1 to 3, characterized in that releasable fastening and supporting elements (22, 25) for the electrode cooling device (10) are arranged above cooled parts of the same.

5. The electrode holder as claimed in claim 4, characterized in that the releasable fastening and supporting elements (22, 25) are accessible from the side.

6. The electrode holder as claimed in one of claims 1 to 5, characterized in that it comprises spray nozzles (40) which are directed at the electrode (12) and are equipped with a compressed air supply (42, 43).

7. The electrode holder as claimed in claim 6, characterized in that the compressed air supply (42) opens out into the nozzle bores (40).

8. The electrode holder as claimed in claim 6 or 7, characterized in that a row of spray nozzles (40) is arranged on or in the wall (17) of the cooling device and connected to the wall (17) along this row is a compressed air line (43), from which connecting bores (42) lead to the nozzle bores (40).

9. The electrode holder as claimed in one of claims 1 to 3, characterized in that a shield (44) which covers the direct spraying direction from the bath or arc to the openings is provided underneath the openings of the nozzles (40).

10. The electrode holder as claimed in claim 9, characterized in that, underneath the nozzles (40), the cooling device (10) comprises a wall (14) which runs transversely in relation to the direction of the electrode and the edge (44) of which protrudes further toward the electrode than the nozzles (40), to form the shield.